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Effectiveness on Prevention of Road Traffic Accidents among School Going Children

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ABSTRACT: The child is the most precious possession of mankind, most loved and perfect in its innocence. Children are to be cared and protected from environmental hazards. Accidents do not just happen; they are the result of thoughtfulness, carelessness, neglect and momentary lack of concentration. The most common type of injuries occur from motor vehicle crashes and bicycle crashes which are seen in children below age group of 12. A descriptive evaluative approach with quasi experimental one group pretest-posttest design was used. School going children's (n=100) who fulfilled the inclusion criteria were selected by probability simple random method. Tools used were structured questionnaire schedule to collect the demographic data and to assess the knowledge of road traffic accidents among school going children. Students were given a pretest followed by the teaching programme and a post test was administered 5-7th day. A group of 50 students were selected at a time for 30 minutes was selected for intervention programme. Data was tabulated and analyzed using descriptive and inferential statistics. The finding revealed that in pre-test out of 100 sample (83%) had inadequate knowledge on road traffic rules and regulation and (17%) had moderately adequate knowledge . After the structured teaching programme the post test results were, out of 100 samples (99%) children had adequate knowledge and (1%) had moderate knowledge on road traffic accidents planned teaching programme was effective in improving the knowledge to prevention of road traffic accidents among school going children and, have implication for nursing, community and to the teachers.

KEYWORDS: Effect, Structured teaching programme, Knowledge, Road traffic accidents, School going children.

I. INTRODUCTION

School children are full of vigour and impulse, impatient and rush and expose themselves to such hazards. The school children continue to learn the values and competencies that they will bring into the adult world. H.M Swami (2009) evaluated the road safety awareness and practices among school children. Oxley JA (2010) determined the impacts of functional performance behavior and traffic exposure on road crossing judgements of young children. Howard A evaluated the role of pedestrian traffic injuries among children. Hotz G (2010) evaluated a school based pedestrian safety intervention program.

II. MATERIALS AND METHODS

A quasi experimental research design was chosen to evaluate the effectiveness of road traffic accidents among school going children. we have chosen 100 school going children between the age of 10 – 12 years. A day was chosen and children were selected by the lottery method. On the same day the pre test was conducted followed by a structured teaching programme by using flash card. It contains basic rules of the road. The idea behind formulating such rules is that the roads are meant not only for the drivers but also shared by the pedestrians and animals by the road side. A traffic light, traffic signal or a stop light is a signaling device positioned at a road intersection to indicate when it is fast and thus expose themselves to hazards.

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SCORING KEY :<50% Inadequate knowledge ; >51-74% moderately adequate; >75% adequate knowledge.

PRETEST	STP	POST TEST
01	X	02

III. RESULT AND DISCUSSION

The study was conducted to evaluate the effectiveness of road traffic accidents among school going children. Quasi experimental, one group pre test ant post test research design to evaluate the approach was adopted. The sample was selected by using lottery method technique. The sample comprises of 100 school going children.

3.(a)Distribution of demographic characteristics of school children

A majority of 48% students were in a age group of 10 years ,38% in a age group of 11 years and 14% in a age group of 12 yrs. Males were54% and females were 46%. Educational status of father and mother respectively are 36% and 38% completedgraduation.Area of residence in rural and urban were 6% and 94% respectively.

3.(b) TABLE 1 Pre test level of knowledge among school going children.

N=100

S. NO	KNOWLEDGE	PRE TEST					
		Inadequate (0-49%)		Moderate (50-74%)		Adequate >75%	
		No	%	NO	%	No	%
1.	Rules and regulation	83	83.0	17	17.0	-	-
2.	Firstaid measures	95	95.0	5	5.0	-	-
3.	Road traffic signals	97	97.0	3	3.0	-	-

A majority of children 83% had inadequate knowledgeon road traffic rules and regulation, 17% had moderately adequate knowledge and none had adequate knowledge. A vast majority of children 95% had inadequate knowledge,5% had moderately adequate knowledge and none of them had adequate knowledge regarding firstaid. A majority of children 97% had adequate knowledge,3% had moderately knowledge none had adequate knowledge regarding traffic signals.

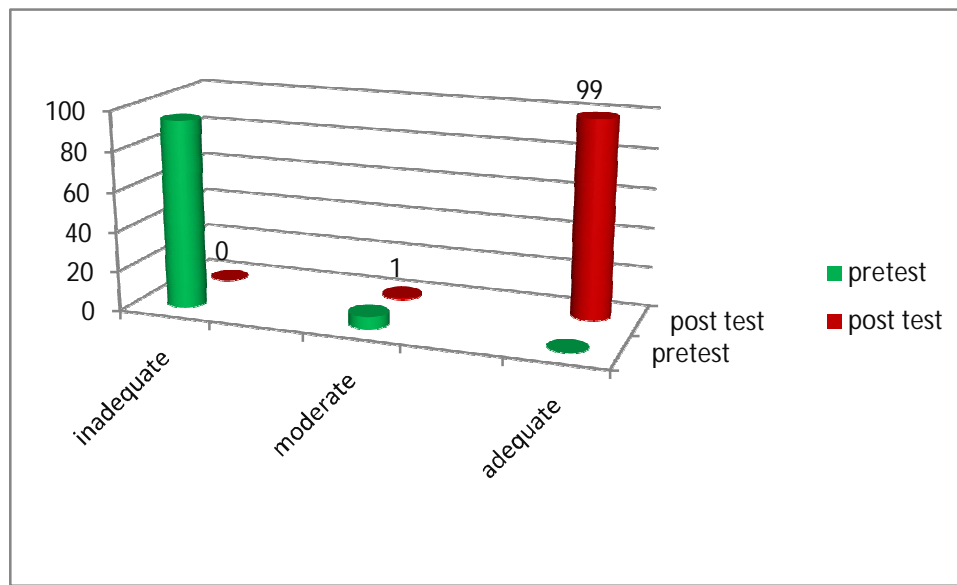
3. (c)Table 2 :Post test level of knowledge among schoolgoing children

S. NO	KNOWLEDGE	POST TEST					
		Inadequate (0-49%)		Moderate (50-74%)		Adequate >75%	
		No	%	NO	%	No	%
1.	Rules and regulation	-	-	-	-	100	100
2.	Firstaidmeasures	-	-	3	3.0	97	97.0
3.	Roadtrafficsignals	-	-	10	10.0	90	90.0

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3.(d) FIG 1.Comparison of pre test and post test level of knowledge on school going children

3.(e) Table 3 :Mean and standard deviation for the knowledge of the children in the pretest and the post test. N=100

S. NO	KNOWLEDGE	PRE TEST		POST TEST		Paired 't' test
		MEAN	S.D	MEAN	S.D	
1.	Rules and regulation	35	8.2	92	3.56	57.79
2.	First aid measures	25	12.38	82	9.2	38.40
3.	Road traffic signals	28	13.43	90	5.79	46.24

“P” Value < 0.001 is significant. The paired ‘t’ test values shows that there is a statically significant improvement in the knowledge regarding road traffic rules and regulation first aid measures and road traffic signals. The paired ‘t’ test value of the knowledge was highly significance at $p < 0.001$ between pre and post test

IV. CONCLUSION

The study was associated with the effectiveness on road traffic accidents among school going children. The knowledge of school children regarding road traffic accidents was adequate. Thus the study showed that educating the school children regarding road traffic accidents will help to reduce the incident of accidents and promote preventive measures among school children.

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